

1.(Cancelled)

2.(Currently Amended)      A door, comprising:

a door frame; and

a door leaf that swings on hinges in thesaid door frame and receives an electrical input signal, thesaid door leaf including front and rear cover panels with a first transducer device mounted therein, wherein the said-door leaf acts as a loudspeaker and includes a structural part that maintains fed-in vibrational energy and propagates this energy in at least one active surface perpendicular to its thickness to distribute resonance mode vibration components over at least one surface, which has a first location within it for thesaid first transducer device, which is affixed on the structural part at thesaid first location to set the structural part into vibration and to allow it to resonate, thus creating an acoustic radiator that delivers an acoustic output signal when it vibrates in resonance, thesaid front and/or thesaid rear cover panel of the door leaf being part of thesaid stiff, light structural component,

wherein the electrical input signal is conducted from thesaid door frame to thesaid door leaf over at least one hinge, and a second transducer is mounted in a second recess between thesaid front and rear cover panels, wherein thesaid second transducer is orientated to drive thesaid rear parallel cover panel to resonance in order to deliver a rearward launched acoustic output wave, and thesaid first and second transducers are separated by a flexible damping support element.

3.(Cancelled)

4.(Cancelled)

5.(Cancelled)

6.(Cancelled)

7.(Cancelled)

8.(Currently Amended)      A door, comprising:

a door frame;

a door leaf that swings on hinges in thesaid door frame and receives an electrical input signal, thesaid door leaf including front and rear cover panels with a first transducer device mounted therein, ~~wherein said~~ the door leaf acts as a loudspeaker and includes a structural part that maintains fed-in vibrational energy and propagates this energy in at least one active surface perpendicular to its thickness to distribute resonance mode vibration components over at least one surface, which has a first location within it for thesaid first transducer device, which is affixed on the structural part at thesaid first location to set the structural part into vibration and to allow it to resonate, thus creating an acoustic radiator that delivers an acoustic output signal when it vibrates in resonance, thesaid front and/or thesaid rear cover panel of the door leaf being part of thesaid stiff, light structural component, ~~wherein~~ thesaid door leaf has at least one bass reflex opening, and

a second transducer mounted in a second recess between thesaid front and rear cover panels, ~~wherein said~~ the second transducer is orientated to drive thesaid rear parallel cover panel to resonance in order to deliver a rearward launched acoustic output wave, and thesaid first and second transducers are separated by a flexible damping support element.

9.(Currently Amended) The door of claim 2, wherein ~~said~~ the front cover panel is equipped with a clamping device that maintains ~~thesaid~~ structural part of ~~thesaid~~ front and/or rear cover panel under an adjustable amount of tension.

10.(Cancelled)

11.(Currently Amended) The door leaf of claim 2, wherein ~~said~~ the first transducer comprises an electrodynamic inertial vibration driver.

12.(Currently Amended) The door leaf of claim 2, wherein ~~said~~ the first transducer comprises a piezoelectric driver.

13.(Currently Amended) The door leaf of claim 2, wherein ~~said~~ the structural part comprises a nomex honeycomb structure.

14.(Currently Amended) The door leaf of claim 2, wherein ~~said~~ the structural part comprises an aluminum honeycomb structure.

15.(Currently Amended) The door leaf of claim 2, wherein ~~said~~ the structural part comprises a high resistance foam.

16.(Cancelled)

17.(Currently Amended) The door leaf of claim 11, further comprising an adjustable clamping device that controls the amount of tension in the region of thesaid structural part to selectively change the acoustic properties of thesaid structural part.

18.(Currently Amended) The door leaf of claim 17, wherein thesaid front cover and thesaid rear cover include multi-layer pinewood veneer.

19.(Cancelled)

20.(Cancelled)

21.(Currently Amended) The door leaf of claim 8, further comprising an adjustable clamping device that controls the amount of tension in the region of thesaid structural part to selectively change the acoustic properties of thesaid structural part.

22.(Currently Amended) The door leaf of claim 8, wherein ~~said~~ the structural part comprises a nomex honeycomb structure.

23.(Cancelled)

24.(Currently Amended) A door, comprising:  
a door frame; and

a door leaf that swings on hinges in ~~thesaid~~ door frame and receives an electrical input signal, ~~thesaid~~ door leaf including front and rear cover panels with a first transducer device mounted therein, wherein ~~thesaid~~ door leaf acts as a loudspeaker and includes a stiff, light structural part that maintains fed-in vibrational energy and propagates this energy in at least one active surface perpendicular to its thickness to distribute resonance mode vibration components over at least one surface, which has a first location within it for ~~thesaid~~ first transducer device, which is affixed on the structural part at ~~thesaid~~ first location to set the structural part into vibration and to allow it to resonate, thus creating an acoustic radiator that delivers an acoustic output signal when it vibrates in resonance, ~~thesaid~~ front and/or ~~thesaid~~ rear cover panel of the door leaf being part of ~~thesaid~~ stiff, light structural component,

wherein the electrical input signal is conducted from ~~thesaid~~ door frame to ~~thesaid~~ door leaf over at least one hinge, and a second transducer is mounted in a second recess between ~~thesaid~~ front and rear cover panels, wherein ~~said the~~ second transducer is orientated to drive ~~thesaid~~ rear parallel cover panel to resonance in order to deliver a rearward launched acoustic output wave, and ~~thesaid~~ first and second transducers are separated by a flexible damping support element.

25.(Currently Amended) The door of claim 24, wherein ~~said the~~ first transducer includes an electrodynamic inertial vibration driver.

26.(Currently Amended) The door of claim 24, wherein ~~said the~~ front cover panel is equipped with a clamping device that maintains ~~thesaid~~ stiff, light structural part of ~~thesaid~~ front and/or rear cover panel under an adjustable amount of tension.

27.(Currently Amended) The door leaf of claim 24, further comprising an adjustable clamping device that controls the amount of tension in the region of ~~thesaid~~ stiff, light structural part to selectively change the acoustic properties of ~~thesaid~~ stiff, light structural part.

28.(Currently Amended) The door leaf of claim 24, wherein ~~said~~ the first transducer comprises a piezoelectric driver.

29.(Currently Amended) The door leaf of claim 24, wherein ~~said~~ the stiff, light structural part comprises a nomex honeycomb structure.

30.(Currently Amended) The door leaf of claim 24, wherein ~~said~~ the stiff, light structural part comprises an aluminum honeycomb structure.

31.(Currently Amended) The door leaf of claim 24, wherein ~~said~~ the stiff, light structural part comprises a high resistance foam.